



## **EQUIPMENT REPLACEMENT AND FACILITY UPDATE PLAN**



### **APPARATUS REPLACEMENT PLAN**

GLFPD currently maintains a fleet of two type 1 engines, one type 1 quint, two type 6 engines, two type 3 engines, two type 2 tenders, two BLS ambulances, one type 3 rescue boat, one quick response vehicle (QRV), one command vehicle, one Fire Marshal vehicle, one UTV, and two snowmobiles.

Creating a proper apparatus replacement plan is imperative for the planning of replacement and if necessary, the addition of apparatus. Current costs to replace fire apparatus include a range of \$500,000 to \$1 million for a fire engine and \$1 million to \$1.75 million for a quint. Type 3 engines cost range from \$350,000 to \$500,000 and type 6 engine \$150,000 TO \$350,00. Ambulances, while costing significantly less than fire apparatus, cost upwards of \$350,000. Identifying the potential costs for replacement/addition of these valuable assets and proactive funding of apparatus reserves allows for these purchases while decreasing the strain on the already overburdened taxpayer.

Apparatus replacement should be done through proper planning. There are a number of recommended guidelines or best practices that identify an expected replacement date for fire apparatus, however for a district the size and call volume of GLFPD, these dates may be unrealistic and burdensome.

It is the goal of this GLFPD Apparatus Replacement Plan to adequately identify the current and potential future needs of the district.

#### **APPARATUS REPLACEMENT PLAN CONSIDERATIONS**

Currently the GLFPD has no standard apparatus or equipment depreciation and replacement schedule, nor does it have an amortized equipment replacement fund. Whether purchasing new or quality-used apparatus, the one constant with a department the size of the GLFPD is an annual, recurring need to address significant capital expenditures. A recommended standard cycle of fire apparatus replacement is 10 years of “front line” service and 10 years of “reserve” service before being cycled out of the fleet. The current funding stream is not sufficient to replace firefighting apparatus on a reasonable schedule of 10 years of “front line” service and 10 years of “reserve” service. However, given the available resources and lower call volume of GLFPD, it may be more practical to extend the service life to 15 years of “front line” service followed by a minimum of 10 years of “reserve” service.

Adjusting service life of apparatus (up or down in the number of service years) is based on the continual analysis of on-going maintenance costs to determine trends in exceptional costs that are in excess of routine preventative and regular maintenance expenditures. Apparatus maintenance records should indicate how much time is spent in time and materials for maintenance costs on a single piece of apparatus. This analysis will allow the ability to flag apparatus that has gone beyond cost-effectiveness equilibrium.



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Management of the fleet requires good preventative maintenance practices in an effort to get the best benefit from the apparatus for the safety of our personnel and the public we serve. Annual budget planning for the adequate maintenance of these valuable resources is necessary. It is important to note that as apparatus becomes older, the costs for maintenance often increase as well.

Replacement considerations of apparatus should include several factors. These factors include but are not limited to:

- Wear and tear on the vehicle
- Mileage or service hours
- Call volume
- Size of district
- Safety considerations of current vehicle and current safety enhancements available
- Age of vehicle

### APPARATUS AND VEHICLE REPLACEMENT SCHEDULE

Table 1 Apparatus and Vehicle Replacement Schedule per Type			
Apparatus	Front Line	Backup / Reserve	Decommission / Sale
Type 1 Engine	15 years	10 years	25 years
Type 1 Aerial	20 years	10 years	30 years
Type 3 Engine	20 years	5 years	25 years
Type 6 Engine	10 years	5 years	15 years
Tender	20 years	10 years	30 years
Ambulance	10 years	N/A	10 years
Chief Vehicle	5 years	Move to staff vehicle	N/A
Marshal Vehicle	10 years	N/A	10 years
QRV	10 years	N/A	10 years
Staff Vehicle	5 years	N/A	10 years
Rescue Boat	20 years	5 years	25 years

Table 2 GLFPD Actual Apparatus and Vehicle Replacement Schedule				
Apparatus	Year in Service	Front Line	Backup / Reserve	Decommission / Sale
Engine 361	2021	2021 to 2036	2036 to 2046	2046
Engine 381	2002	2002 to 2021	2021 to 2036	2036
Ladder 362	2021	2021 to 2041	2041 to 2051	2051
Ladder 382	2002	2002 to 2021	2021 to sell date	TBD
Engine 363	2008	2008 to 2028	2028 to 2032	2032
Engine 383	2001	2001 to 2021	2021 to 2026	2026
Engine 366	2019	2019 to 2029	2029 to 2034	2034
Engine 376	2002	2002 to 2021	2021 to 2029	2029



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Tender 364	2004	2004 to 2024	2024 to 2034	2034
Tender 384	2004	2004 to 2024	2024 to 2034	2034
Medic 360	2019	2019 to 2029	N/A	2029
Medic 370	2008	2021 to sell date	5 years	TBD
R365	2019	2019 to 2029	N/A	2029
C351	2019	2019 to 2024	Move to staff	2029
Marshal 353	2020	2020 to 2030	N/A	2030
R375	2006	2006 to 2026	2026 to 2031	2026